

**Before the  
Federal Communications Commission  
Washington, D.C. 20554**

In the Matter of

Improving Public Safety Communications In  
the 800 MHz Band

Consolidating the 800 and 900 MHz  
Industrial/Land Transportation and Business  
Pool Channels

Amendment of Part 2 of the Commission's Rules  
Allocate Spectrum Below 3 Ghz for Mobile and  
Fixed Services to Support the Introduction of New  
Advanced Wireless Services, including Third  
Generation Wireless Systems

Petition For Rule Making of the Wireless  
Information Networks Forum Concerning the  
Unlicensed Personal Communications Service

Petition For Rule Making of UT Starcom, Inc.,  
Concerning the Unlicensed Personal  
Communications Service

Amendment of Section 2.106 of the Commission's  
Rules to Allocate Spectrum at 2 Ghz for Use by  
the Mobile Satellite Service

To: The Commission

WT Docket 02-55

ET Docket No. 00-258

RM-9498

RM-10024

ET Docket No. 95-18

**COMMENTS TO FURTHER NOTICE OF PROPOSED RULE MAKING**

Smart-Link Communications, Inc. (Smart-Link) hereby submits comments to In the Matter of Improving Public Safety Communications in the 800 MHz Band, New 800 MHz Band Plan for U.S. - Canada Border Region, *Further Notice of Proposed Rule Making*, WT Docket No. 02-55 (released November 1, 2007) ("FNPRM"). Smart-Link is pleased that the Commission sought comment on these matters, since the Commission has previously evinced a tendency to issue public

notices that introduce substantive changes in the docket and previous rule makings without the benefit of notice and comment in accord with law. Accordingly, the subject FNPRM is a refreshing change in the manner by which the Commission is legislating in the 800 MHz rebanding arena.

### Continued Interleaving Presents Challenges

Under the Commission's proposed band plans for a number of regions<sup>1</sup>, B/ILT and ESMR operations will share a band, i.e. the operations will continue to be interleaved and, thus, the potential for the creation of harmful interference to existing analog systems operated by incumbents will be vulnerable to interference from low-site cellularized operations. It is this very condition that the Commission sought to remedy in its previous efforts and yet, this condition is not addressed specifically within the FNPRM. Although the Commission did not (except in Region 3) propose to include public safety licensees within the interleaved band plan, public safety systems may indeed enter the band in all border regions via future applications under the Commission's plan to reserve those channels for public safety applications for a three-year period.

The question as to the level of interference protection that non-ESMR operators might expect is highly relevant. Given the absence of an expansion band or a guard band for most regions<sup>2</sup>, the issue is one of reliable operations during and post rebanding. As the Commission has consistently found, the separation of analog and digital, cellularized operations is the greatest tool in reducing the

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<sup>1</sup> See, Appendix C to FNPRM, for Regions 1, 2, 3, 4, 5, and 6.

<sup>2</sup> Only Regions 7A and 8 has both and Region 7B only has a guardband, while the remaining Regions have neither.

incidents of harmful interference. However, the Commission's proposals do not include any such separation for operations due to the new interleaved bands.

Smart-Link is not ignorant of the challenges facing the Commission in determining the means of accomplishing a rebanding along the Canadian border regions given the relatively small amount of spectrum available to accomplish the task. However, meeting the Commission's challenges should not be accomplished by increasing the vulnerability of incumbent licensees' operations. Those affected B/ILT and public safety licensees are entitled to equal protection under the law, including such interference protection offered to similarly situated licensees in non-border regions. Accordingly, Smart-Link respectfully requests that the Commission state clearly that all border region, non-ESMR operations will be afforded protection from harmful interference that is equal to the interference protection extended to all non-ESMR operations outside of the previously allocated non-guard band and non-expansion band areas, i.e. operations within the 856-860 MHz band. If affected B/ILT and public safety entities are to be made to share spectrum with cellularized ESMR operations, then such protection is required and essential.<sup>3</sup>

Smart-Link recognizes that its proposal regarding interference protection may require ESMR operators to carefully position and channelize their operations to protect non-ESMR operations and that such activities may prove difficult at times. Additionally, the adoption of the interference protection proposed might also cause ESMR operators to have to position their cells higher on

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<sup>3</sup> Smart-Link recommends that the Commission adopt rules for operation in the interleaved band that are consistent with 47 C.F.R. §§ 90.617 (k)(1)(i) & (2)(i).



towers to avoid signal saturation that could lead to receiver overload. And cellular carriers might need to be more judicious in anticipating intermodulation products and OOB that can lead to harmful interference. However, requiring good rf engineering and a cooperative use of the band to provide the recommended protection is essential to the Commission's overall goal of remedying harmful interference to innocent operators that will be nonetheless required to participate in rebanding.<sup>4</sup>

Therefore, for the reasons stated above, it is essential that the Commission extend interference protection to affected B/ILT and public safety operations in border regions that are equal to the protection afforded operations that are rebanded throughout the United States. To do otherwise would be to deny equal protection to essential operations based on nothing more than the geographic location of those operations. There should exist no penalty for operating in border regions and the Commission's adoption of the recommended interference protection will assure equal treatment.

#### The Instant Request Is Consistent With The Commission's Previous Statements

The Commission has consistently sought to protect existing, analog operations from unacceptable interference. As the Commission stated in *Improving Public Safety Communications in the 800 MHz Band*, WT Docket 02-55, *Report and Order, Fifth Report and Order, Fourth Memorandum Opinion and Order*, 19 FCC Rcd 14969 (2004) ("*800 MHz Order*") at ¶ 102, "it

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<sup>4</sup> Providing the recommended protection will also assist in fulfilling the Commission's obligation to small business under the Regulatory Flexibility Act since B/ILT operations are more likely to be engaged in by small business than ESMR operations.

appears to us that establishing an interference abatement entitlement standard must be the very first step in attacking the problem of unacceptable interference. . .” Smart-Link’s suggestions, therefore, are consistent with the Commission’s setting of priorities to first adopt standards for interference protection and second, to adopt spectrum reallocation to fulfill the long term promises of rebanding.

At paragraph 105 of the *800 MHz Order*, the Commission stated, “we specify that public safety, CII, and other non-cellular 800 MHz systems must receive at least a minimum measured input signal power of -101 dBm for portable (i.e. hand-held) units and -104 dBm for vehicular mobile units in order to be eligible for protection from interference.” Smart-Link accepts this standard for eligibility for interference protection and suggest that it be extended to operations within the new interleaved bands following rebanding within the Canadian border region. Based on this condition for eligibility, Smart-Link recommends that the Commission adopt a definition of unacceptable interference “as any impairment to the desired signal that causes the  $C/(I+N)$  ratio of a voice radio receiver to drop below 20 dB,” *800 MHz Order* at ¶ 107, and such other protections afforded by the Commission for operations in the 856-860 MHz band in other regions of the United States. Specifically, Smart-Link recommends that the Commission state specifically that those protections provided and methodologies adopted within paragraphs 108-141 of the *800 MHz Order* be fully extended to affected licensees operating on interleaved channels within the Canadian border regions. Smart-Link deems a specific statement necessary to reconcile the differences in spectrum allocation and the effect on licensees during and following rebanding while operating above Line A.

### Conclusion

Smart-Link again thanks the Commission for the opportunity to point out an essential missing element within the FNPRM. Absent the Commission's clear statement on this subject, the allocation plan cannot be evaluated as to the effect that adoption might have on existing and future operations in the border region. What is sought is the protection to which licensees are entitled following an equal application of law and the Commission's previous statements within its *800 MHz Order*. To provide less would resound in inequity and failure to provide equal protection under law based on nothing more than geography. Smart-Link does not believe that such a result is intended by the Commission in its Canadian border reallocation, but Smart-Link urges the Commission to confirm their faith in the Commission's intentions.

Respectfully submitted,

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By



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